

What is claimed is:

1. A method comprising:

dividing a frequency bandwidth of a channel into two or more frequency sub-channels to be used to transport two or more acknowledgment signals that acknowledge reception of a multicast transmission of a data packet by a group that includes two or more stations.

2. The method of claim 1, comprising:

performing a first multicast transmission of a first data packet to the group;
and

performing a second multicast transmission of a second data packet after at least a subset of stations of the group acknowledged a reception of the first frame.

3. The method of claim 1, comprising:

retransmitting the data packet until an acknowledgement signal is received from a subset of stations of the group.

4. The method of claim 1 wherein allocating comprises:

receiving a group membership request from at least a subset of the stations of the group; and

sending membership acceptance to the subset of stations of the group.

5. The method of claim 1 comprising authenticating a station of the group.

6. The method of claim 1 comprising:

allocating a sub-channel of the two or more sub-channels based on a signal strength of a received acknowledgement signal.

7. The method of claim 1 comprising:

allocating a station to the group based on a received signal strength of the station.

8. The method of claim 7, comprising:

allocating a first multicast address to the station when the station is included in a first group; and

allocating a second multicast address to the station when the station is included in a second group.

9. A method comprising:

acknowledging reception of a data packet multicast transmitted over a dedicated frequency sub-channel of a wireless communication system.

10. The method of claim 9 comprising:

requesting a group membership from a multicast transmitting station;
and

receiving a group membership acceptance from the multicast transmitting station.

11. The method of claim 9, wherein acknowledging comprises transmitting a burst signal to a multicast transmitting station over the dedicated frequency sub-channel for a predetermined period of time.

12. The method of claim 9, wherein acknowledging comprises transmitting an acknowledgement frame to a multicast transmitting station over the dedicated frequency sub-channel.

13. The method of claim 9, wherein acknowledging comprises transmitting a predetermined signal pattern to a multicast transmitting station over the dedicated frequency sub-channel.

14. An apparatus comprising:

a channel divider to divide a frequency bandwidth of a channel into two or more frequency sub-channels to be used to transport acknowledgment signals to acknowledged a reception of a multicast transmission by two or more stations of a group of stations; and

an allocator to allocate the two or more frequency sub-channels to the two or more stations.

15. The apparatus of claim 14, comprising:

a transmitter to perform a first multicast transmission of a first data packet to the group of stations and to perform a second multicast transmission of a second data packet after at least a subset of stations of the group acknowledged a reception of the first frame.

16. The apparatus of claim 14, wherein the transmitter performs a retransmission of the first or the second data packet until an acknowledgement signal is received from the subset of stations.

17. The apparatus of claim 14 comprising:

a controller to receive a group membership request from at least subset of the stations of the group and to send group membership acceptance message to the subset of stations.

18. The apparatus of claim 17 wherein the controller is able to authenticate the subset of the stations of the group.

19. The apparatus of claim 14 wherein the allocator is able to allocate a sub-channel of the two or more sub-channels based on a signal strength of a received acknowledgement signal.

20. The apparatus of claim 19 wherein the acknowledgement signal comprises a predetermined pattern.

21. A mobile communication device comprising:

- a generator to generate an acknowledgement signal; and
- a transmitter to transmit the acknowledgement signal to respond on a reception of a data packet of a multicast transmitted over a dedicated frequency sub-channel of a wireless communication system.

22. The mobile communication device of claim 21 comprising:

- a requestor to request a group membership station; and
- a receiver to receive a group membership acceptance.

23. The mobile communication device of claim 21 wherein the acknowledgement signal comprises a burst signal having a predetermined period.

24. The mobile communication device of claim 21 wherein the acknowledgement signal comprises an acknowledgement message.

25. The mobile communication device of claim 21 wherein the acknowledgement signal comprises a predetermined pattern.

26. The mobile communication device of claim 21 wherein the acknowledgement signal comprises a modulated carrier.

27. The mobile communication device of claim 21 wherein the acknowledgement signal comprises an unmodulated carrier.

28. A processor comprising:

a channel divider to divide a frequency bandwidth of a channel into frequency sub-channels to be used for acknowledged a reception of multicast transmission by a group of stations; and

an allocator to allocate at least some sub-channels to a subset of stations of the group to acknowledge reception of the data packet over the at least some sub-channels.

29. The processor of claim 28, comprising:

a controller to control a transmitter to perform a first multicast transmission of a first data packet to the group of stations and to perform a second multicast transmission of a second data packet after at least the subset of stations acknowledged a reception of the first data packet.

30. The processor of claim 28 comprising:

a controller to receive a group membership request and to send a group membership acceptance message.

31. The processor of claim 28 comprising:

an authenticator to authenticate at least the subset of the stations.

32. The processor of claim 28, comprising a generator to generate an acknowledgement signal.

33. The processor of claim 28 comprising:

a requestor to request a group membership; and
a memory to store a group membership token.

34. A mobile communication device comprising:

- a dipole antenna to transmit an acknowledgement signal;
- a generator to generate the acknowledgement signal; and
- a transmitter to transmit the acknowledgement signal to responded on a reception of a data packet of a multicast transmitted over a dedicated frequency sub-channel of a wireless communication system.

35. The mobile communication device of claim 34 comprising:

- a requestor to request a group membership station; and
- a receiver to receive a group membership acceptance.

36. The mobile communication device of claim 34 wherein the acknowledgement signal comprises a burst signal having a predetermined period.

37. A wireless communication system comprising:

two or more stations to transmit acknowledgement signal to respond on a reception of a data packet of a multicast transmitted over two or more dedicated frequency sub-channels, respectively.

38. The wireless communication system of claim 37, comprising:

an at least one access point to dividing a channel of the wireless communication into two or more dedicated frequency sub-channels.

39. The wireless communication system of claim 38, wherein the access point is able

to group the two or more stations into a group and to transmit multicast transmission to the group.

40. An article comprising: a storage medium, having stored thereon instructions, that when executed, result in:

dividing a frequency bandwidth of a channel into two or more frequency sub-channels to be used to transport two or more acknowledgment signals that acknowledge reception of a multicast transmission of a data packet by a group that includes two or more stations.

41. The article of claim 40, wherein the instructions, when executed, result in:

performing a first multicast transmission of a first data packet to the group; and

performing a second multicast transmission of a second data packet after at least a subset of stations of the group acknowledged a reception of the first frame.

42. The article of claim 40, wherein the instructions, when executed, result in:

retransmitting the data packet until an acknowledgement signal is received from a subset of stations of the group.

43. The article of claim 40, wherein the instructions, when executed, result in:

receiving a group membership request from at least subset of the stations of the group; and

sending membership acceptance to the subset of stations of the group.